# Environmental and Economic Benefits of Kentucky's 2002 and 2006 Solid Waste Legislation Presentation to North Carolina Environmental Review

Commission

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Kentucky Environmental & Public Protection
Cabinet
Division of Waste Management
Recycling and Local Assistance Branch
Sara D. Evans, Manager



To Protect and Enhance Kentucky's Environment



#### Overview



- Solid waste challenges prior to 2002 legislation
  - Illegal Dumps
  - Litter
  - Waste Disposal
  - Abandoned/Orphan Landfills
  - Declining Recycling Rates
- HB 174
- Improvements realized since passage of legislation
- Summary





# **Illegal Dumps**

- Kentucky had a legacy of thousands of illegal dumps across the state (over 4,000 reported annually during 1990's)
- In the late 90's, in the interest of improving the environment, tourism and economic development, Governor Patton, EPPC Secretary Bickford and Congressman Hal Rogers made Cleaning up Kentucky the state's top priority.
- Cabinet stepped up enforcement, including hidden cameras at dumpsites.
- Counties were responsible for cleanups, and joined forces in the cleanup campaign, but complained of unfunded mandate.





#### Litter

- With few requirements for cleanup and prevention, roadways were not routinely cleaned and state government received many citizen complaints.
- Law enforcement officials had limited time and staff to enforce litter laws.
- Most cleanups on rural roads and many state roads were conducted by volunteer groups.
- Transportation Cabinet conducted some cleanup of state roads, in some cases only once per year.





#### **Waste Disposal**



- Kentucky hosts 26 contained landfills, 16 privately owned and 10 municipally owned.
- Prior to state review, Kentucky law requires local government approval for any landfill expansion or new construction.
- Kentucky has 20+ years of landfill capacity.
- Waste disposal increased 20% overall through the 1990's, with out of state waste imports almost quadrupling from 1991-2001.
- At an average of \$26.00/ton in 2001, Kentucky's tipping fees were about \$6.00 per ton cheaper than the average of the six surrounding states. All states but Virginia imposed an environmental remediation fee as part of the tipping fee.





# Orphan/Abandoned Landfills

- "Orphan landfills" distinguished from "illegal dumps" as a disposal site once considered the "de-facto" community waste site or a previously permitted but currently unused site.
- Approximately 670 orphan landfills statewide, with costs of characterization, remediation and closure varying from \$500,000 to \$9 million+ per landfill.
- Prior to 2002 legislation, county governments were responsible for closure and remediation, but most lacked funding and technical expertise.
- Closures occurred sporadically, approximately 1 every 5 years, with only a handful certified closed by 2001.





## Recycling



- In 2004, Kentuckians threw away \$63 million in recycling value for paper, plastic and aluminum.
- We recycled 22% of our paper, plastic, aluminum, steel and glass in 2004, an improvement over 13% in 2001.
- Only 27% of Kentucky households have access to curbside recycling.
- Kentucky is home to twelve (12) major manufacturers of products made from recycled materials. Manufacturers buy recyclables worldwide, and expressed need for more Kentucky recyclables.
- These manufacturers contribute to Kentucky's economy an annual payroll of over \$202 million, added a value of \$612 million and contributed to gross sales of \$1.34 billion in 2005. For every \$1.00 of raw recycled materials processed in Kentucky, an additional value of \$0.44 is added.





#### **HB 174**

- Proposed by Governor Patton and cosponsored by majority leaders in House (D) and Senate (R), the 2002 General Assembly passed HB 174 with virtually unanimous support.
- HB 174 was supported by counties, cities, private landfill companies, Kentucky Farm Bureau, Associated Industries of Kentucky numerous associations and environmental organizations, including the Kentucky Environmental Quality Commission.





#### **HB 174**

- Assesses a \$1.75/ton environmental remediation fee on waste disposed, generating about \$11 million annually.
- About \$6 million is provided to counties for illegal dump cleanups and \$5 million for abandoned landfills.
- Authorized a one-time \$25 million bond sale for orphan landfill program.
- Provides for state government assumption of orphan landfill program.
- Annual \$5 million transfer from Transportation Road Fund to counties and cities for litter abatement programs.
- Cabinet retains \$750,000 annually for implementation.





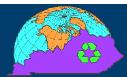


#### **Illegal Dumps:**

- Illegal dumping declined 70% between 2001-2004.
- 2001- 1,807 dumps cleaned at a cost of \$6.6 million, with 1,898 illegal dumps remaining to be cleaned.
- 2004 934 dumps cleaned at a cost of \$3.3 million, with 621 illegal dumps remaining to be cleaned.







#### Litter:

- Almost 10 times more litter was picked up in 2004 than in 2001, and the costs for cleanup dropped significantly:
- 2001 77,501 bags cleaned at a cost of \$4.2 million (\$54.19 per bag).
- 2004 700,438 bags of litter cleaned from 114,837 miles of roadways at a cost of \$8.9 million (\$12.70 per bag).





#### **Disposal:**

- Average tipping fee was \$28.67 in 2004, still \$4 below the average of the surrounding states.
- Disposal continues to rise, but at a slower rate of 8% between 2001-2004. Out-of-state state waste imports have remained steady, and have not increased since 2001.
- 2004 garbage collection costs average of \$12.12 per household per month, as compared with 2001 average of \$11.67.





#### **Orphan Landfills:**

- Cabinet developed prioritization scheme based on risks to human health, safety, and the environment including: exposed waste, leachate outbreaks, surface and groundwater contamination and potential for human use.
- Identified 55 high priority landfills, with 8 selected for immediate action and currently under contract for remediation and closure.







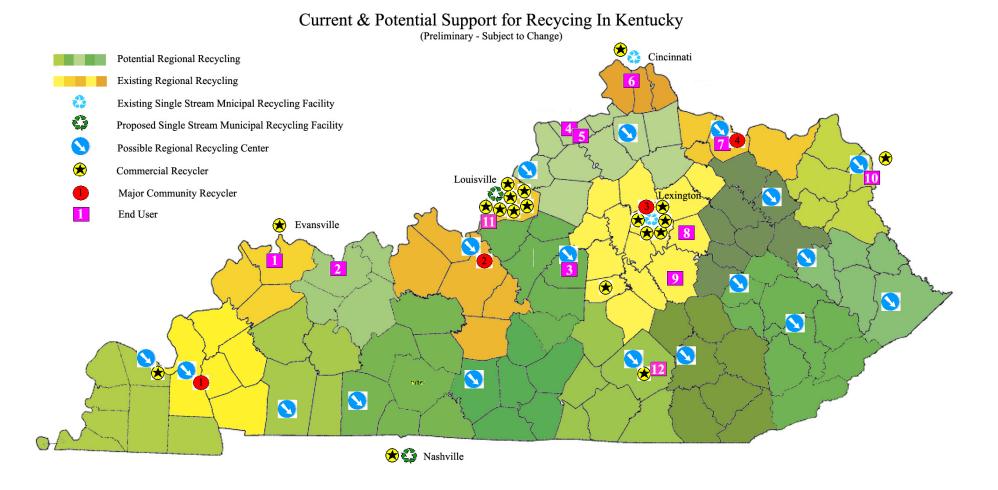
#### Recycling:

- With success of illegal dump cleanup program, the 2006 General Assembly unanimously passed legislation to allow remaining illegal dump funds to be used for recycling grants to local governments (SB 50).
- Approximately \$3 million will be available annually for recycling grants, beginning in 2007.
- Manufacturers, private recyclers, counties, cities, state and environmental groups convene quarterly meetings as Kentucky Recycling Interest Group (KRIG) and agree that funding for recycling infrastructure should be first priority for grants.





# Recycling Infrastructure Projections







# Recycling Infrastructure Projections

### MAJOR COMMUNITY RECYCLING OPERATIONS

- Regional Recycling Corp. (Corrections Industries) – Eddyville
- Fort Knox Recycle Center Fort Knox
- Lexington Urban County
   Government/Bluegrass Regional Recycling Lexington
- Mason County Recycling Center Maysville

#### **END USERS**



- 1. Weyerhaeuser Henderson
- 2. Kimberly Clark Owensboro
- 3. All Weather Insulation Springfield
- 4. North American Stainless Ghent
- 5. Gallatin Steel Ghent
- 6. Signode Florence
- 7. Temple Inland Maysville
- 8. Infiltrator Systems (Champion Polymers)– Winchester
- 9. Novelis Berea
- 10. AK Steel Ashland
- 11. Arco Aluminum Louisville
- 12. Play Mart Somerset





# Summary

- Kentucky has made significant headway in cleanups since passage of HB 174, with minimal cost to households (\$0.45 per month per household increase in garbage collection rates from 2001-2004).
- Waste disposal continues to rise, although more slowly, and importation of out-of-state waste has not increased.
- Making progress with orphan landfill closure, but will be ongoing program for many years at current funding level.
- Community recycling rates improving, and new infrastructure grants expected to significantly improve state's reaching goal of 35%+ by 2010.
- KRIG proving to be excellent forum for advancing and advising cabinet on recycling, reuse and beneficial reuse.
- Investing in recycling returns environmental and economic benefits in energy savings and hundreds of millions to state's economy.





## **Kentucky Government Recycles!**





www.recycle.ky.gov



